



Status Update  
for the

# The Velella Epsilon Project: Pioneering Offshore Aquaculture in the Southeastern Gulf of Mexico:

**NMFS SERO  
Aquaculture Planning Team (APT)**

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June 25, 2020



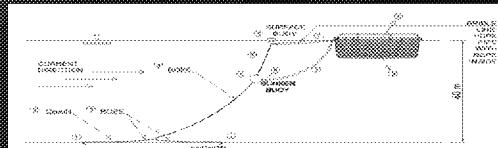
# Velella Epsilon Project

## **Purposes:**

- A. Validate the feasibility of a temporary, small-scale demonstration net pen to stock, culture, and harvest a Federally managed species (Almaco jack; *Seriola rivoliana*); 20,000 fish stocked @ 85% survival rate = 17,000 fish (4.4 lbs./fish)
- B. Conduct environmental monitoring – water quality and benthic analyses per EPA & USACE requirements; and
- C. Address public concerns of open ocean aquaculture in the GOM by:
  - (1) Demonstrating FAD effects to GOM fishing communities; and
  - (2) Encouraging the public and tourists to visit the demonstration site

## **Description Overview:**

- Using a offshore-strength submersible PolarCirkel-style net pen
  - 17m diameter x 7m depth (deep); effective volume ~ 1,600 m<sup>3</sup>
  - On a multi-anchor (3) swivel (MAS)-point mooring system;
  - Using embedment-type anchor mooring; and serviced by a Tender vessel
- Located ~ 40 nautical miles southwest of Sarasota, FL;
  - In ~ 40 m (132 to 134 ft) water depth





# Velella Epsilon Project

## **Project Permitting:**

- USEPA - National Pollutant Discharge Elimination System (NPDES) Permit
  - Application considered complete (11/09/18)
  - Baseline Environmental Survey (BES) and Report (10/26/18)
  - Draft NPDES Permit and Public Notice No. 19FL00001 (08/30/19)
  - USEPA – Draft Ocean Discharge Criteria Evaluation (08/30/19)
  - Public Hearing Notice (December 12, 2019) & Extended Comment Period (February 4, 2020)
  - BMP Plan, Environmental Monitoring Plan, Emergency Response Plan, QA Plan (TBD)
- USEPA & USACE - Endangered Species Act (ESA) Section 7
  - Draft Biological Evaluation (08/30/19)
- USEPA – Magnuson-Stevens Fishery Conservation and Management Act (MSA);
  - Essential Fish Habitat (EFH) Assessment (08/30/19)
- USEPA, USACE, & NOAA – National Environmental Protection Act (NEPA)
  - Draft Environmental Assessment (EA)
- USACE – Rivers and Harbors Act, Section 10 Permit
  - Application considered complete (11/09/18)
- Kampachi Farms, LLC (Ocean-Era, LLC) –Coastal Zone Management Act (CZMA)
  - FL SHPO - National Historic Preservation Act (NHPA) Section 106 and,
  - Coastal Consistency Determination (CCD) Concurrence (02/25/19)



# Velella Epsilon Project

## Project Schedule:

Milestone Activity	Start Date	Finish Date	Months
Obtain All Environmental Permits and Approvals			
VE Demonstration Project Permits	Oct-17	Sep-20	36
Initiate Pursuit of Commercial Permits	Sep-20		
Deploy Demonstration Netpen/Tender Vessel Array			
Port Manatee Staging Area	Dec-20	Jan-21	2
Obtain Mooring and Deployment Equipment	Dec-20	Jan-21	2
Net Pen Delivery	Dec-20	Jan-21	2
Construct & Deploy Net Pen Array	Dec-20	Jan-21	2
Rear a Single Cohort of Almaco Jack			
Larval Runs & Fingerling Production	Dec-20	Feb-21	4
Ship Fingerlings & Stock Net Pen	Mar-21	Mar-21	1
Feeding, Cleaning, & Monitoring	Mar-21	Feb-22	12
Water Quality & Benthic Monitoring	Mar-21	Feb-22	12
Environmental & Data Reports	Feb-21	Apr-22	15
Engagement in Stakeholder & Public Outreach	Oct-17	Feb-22	53
Source Buyer(s)/Dealer(s)	Dec-21	Feb-22	3
Harvest Fish	Jan-22	Feb-22	2
Project Closeout			
Project and Environmental Summary Report	Dec-21	Feb-22	3
Port Manatee Staging Area	Feb-22	Mar-22	2
Obtain Mooring and Netpen Equipment	Feb-22	Mar-22	2
Deconstruction & Shipment of Net Pen Array	Feb-22	Mar-22	2
Manual for Aquaculture Permitting Pathway (MAPP)	Jan-22	Feb-22	2



# Velella Epsilon Project

## Project Outcomes:

- (a) Serving as a Platform for the Promotion of Rational Aquaculture Policies, and demystification of the industry, by providing a working net pen example to politicians, constituents, journalists, and other influencers of policy or public perceptions, as well as the local community;
- (b) Increasing Public Awareness of, and Receptivity Towards, Offshore Aquaculture and the need to culture more seafood in U.S. waters, by providing public tours of the offshore operation, including (possibly) snorkeling inside the net pen, and fee fishing;
- (c) Acting as a Demonstration Platform for Data Collection of Water Quality, potential benthic impacts, and marine mammal and fish stock interactions resulting from offshore aquaculture in the GOM; and
- (d) Providing local recreational, charter, and commercial fishing communities with Evidence of the Benefits of Aquaculture, through the Fish Aggregation Device (FAD) effects of the project, and by documentation of fish aggregation and fishing boat activity around the VE Project.





# Velella Epsilon Project

Thank you!

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